

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A bucket for crushing and screening stone and similar materials, comprising:

a scoop-shaped body defining an inlet opening for the stone to be crushed and an outlet opening for the crushed stone, between which a direction of flow of the stone is defined;

a mechanism for crushing the stone, the crushing mechanism having a first jaw and a second jaw housed in the scoop-shaped body and movable relative to one another; and

an element including at least one eccentric for moving the first jaw relative to the second jaw, the element imparting to the first jaw a combined rotational and translational movement relative to the second jaw, in which a first component of the movement is away from and towards the second jaw and a second component of the movement is substantially parallel to the direction of flow, the combined movement creating a chewing motion.

the at least one eccentric rotating through 180° to define a first position, in which the inlet opening has a maximum cross-section, and a second position, in which the inlet opening has a minimum cross-section.

2. (Previously Presented) The bucket according to claim 1, further comprising an adjuster changing the size of the cross-section of the outlet opening and the movement of the first jaw.

3. (Previously Presented) The bucket according to claim 2 in which the first jaw and the second jaw each comprises respective first and second opposite ends which are positioned, with reference to the direction of flow, in the region of the inlet opening and in the region of the outlet opening, respectively, the element acting on the first end of the first jaw.

4. (Previously Presented) The bucket according to claim 3 in which the second end of the first jaw is coupled with the adjuster.

5. (Currently Amended) The bucket according to claim 3 further comprising in which the element comprises at least one eccentric on which a sleeve is coupled to the at least one eccentric in a freely rotatable manner, the sleeve being fixed firmly to the first end of the first jaw.

6. (Previously Presented) The bucket according to claim 5 in which the element comprises two eccentrics moved by a shaft driven by a drive mechanism, the two eccentrics being coupled with two bearings on which the sleeve is fitted.

7. (Previously Presented) The bucket according to claim 3 in which the adjuster comprises a strut interposed at an adjustable inclination between the second end of the first jaw and the scoop-shaped body.

8. (Previously Presented) The bucket according to claim 7 in which the second end of the first jaw comprises a first channel for housing a first end of the strut in an orientable manner.

9. (Previously Presented) The bucket according to claim 8 further comprising a support mounted on the scoop-shaped body and a set of removable spacers interposed between the support and a second channel which houses a second end of the strut.

10. (Previously Presented) The bucket according to claim 9 in which the second end of the strut is housed in the second channel in alternative operative positions, in order to adjust the inclination between the strut and the first jaw, at rest.

11. (Previously Presented) The bucket according to claim 1 in which each of the first jaw and the second jaw comprises a respective frame on which respective plates are fitted removably.

12. (Previously Presented) The bucket according to claim 11 in which a plurality of grooves are formed on facing surfaces of the plates.

13. (Previously Presented) The bucket according to claim 12 in which the grooves are parallel to one another and extend in the direction of the flow of the stone.

14. (Previously Presented) The bucket according to claim 13 in which the grooves define a plurality of ribs and recesses alternating in succession in a manner such that a rib of the first jaw corresponds to a recess of the second jaw.

15. (Previously Presented) The bucket according to claim 1 in which the second jaw is fixed firmly to the scoop-shaped body.

16. (Previously Presented) The bucket according to claim 7, further comprising a resilient mechanism resiliently urging the second end of the first jaw against the strut.

17. (Previously Presented) The bucket according to claim 16, further comprising means for adjusting the load of the resilient mechanism.

18. (Previously Presented) The bucket according to claim 1, further comprising a vibrator disposed in the region of the inlet opening for bringing about pulsed vibration of the second jaw.

19. (Currently Amended) A bucket for crushing and screening stone and similar materials, comprising:

a scoop-shaped body defining an inlet opening for the stone to be crushed and an outlet opening for the crushed stone, between which a direction of flow of the stone is defined;

a mechanism for crushing the stone, the crushing mechanism having a first jaw and a second jaw housed in the scoop-shaped body and movable relative to one another, the first jaw and the second jaw each having respective first and second opposite ends and the second jaw being fixed firmly to the scoop-shaped body;

an adjuster coupled with the second end of the first jaw, the adjuster changing the size of the cross-section of the outlet opening and the movement of the first jaw and having a strut interposed at an adjustable inclination between the second end of the first jaw and the scoop-shaped body;

a resilient mechanism resiliently urging the second end of the first jaw against the strut;

means for adjusting the load of the resilient mechanism;

a vibrator disposed in the region of the inlet opening for bringing about pulsed vibration of the second jaw; and

an element including at least one eccentric for moving the first jaw relative to the second jaw, the element imparting to the first jaw a combined rotational and translational movement relative to the second jaw, in which a first component of the movement is away from and towards the second jaw and a second component of the movement is substantially parallel to the direction of flow, the combined movement creating a chewing motion, the at least one eccentric rotating through 180° to define a first position, in which the inlet opening has a maximum cross-section, and a second position, in which the inlet opening has a minimum cross-section;

wherein the respective first and second opposite ends of the first jaw and the second jaw are positioned, with reference to the direction of flow, in the region of the inlet opening and in the region of the outlet opening, respectively, the element acting on the first end of the first jaw.

20. (Currently Amended) A bucket for crushing and screening stone and similar materials, comprising:

a scoop-shaped body defining an inlet opening for the stone to be crushed and an outlet opening for the crushed stone, between which a direction of flow of the stone is defined;

a mechanism for crushing the stone, the crushing mechanism having a first jaw and a second jaw housed in the scoop-shaped body and movable relative to one another, the first jaw and the second jaw each having a respective frame on which respective plates are fitted removably and each having respective first and second opposite ends, the second jaw being fixed firmly to the scoop-shaped body;

a plurality of grooves formed on facing surfaces of the plates, the grooves paralleling one another, extending in the direction of the flow of the stone, and defining a plurality of ribs and recesses alternating in succession in a manner such that a rib of the first jaw corresponds to a recess of the second jaw;

an adjuster coupled with the second end of the first jaw, the adjuster changing the size of the cross-section of the outlet opening and the movement of the first jaw and having a strut interposed at an adjustable inclination between the second end of the first jaw and the scoop-shaped body, the strut having a first end and a second end with the first end of the strut being housed in a first channel of the second end of the first jaw in an orientable manner;

a support mounted on the scoop-shaped body and a set of removable spacers interposed between the support and a second channel which houses the second end of the strut, the second end of the strut housed in the second channel in alternative operative positions, in order to adjust the inclination between the strut and the first jaw, at rest;

a resilient mechanism resiliently urging the second end of the first jaw against the strut;

means for adjusting the load of the resilient mechanism;

a vibrator disposed in the region of the inlet opening for bringing about pulsed vibration of the second jaw; and

an element for moving the first jaw relative to the second jaw such that imparted to the first jaw is a combined rotational and translational movement relative to the second jaw, in which a first component of the movement is away from and towards the second jaw and a second component of the movement is substantially parallel to the direction of flow, the combined movement creating a chewing motion, the element including two eccentrics moved by a shaft driven by a drive mechanism and coupled with two bearings on which a sleeve is fitted, the sleeve coupled to the eccentrics in a freely rotatable manner and fixed firmly to the first end of the first jaw, and the eccentrics rotating through 180° to define a first position, in which the inlet opening has a maximum cross-section, and a second position, in which the inlet opening has a minimum cross-section;

wherein the respective first and second opposite ends of the first jaw and the second jaw are positioned, with reference to the direction of flow, in the region of the inlet opening and in the region of the outlet opening, respectively, the element acting on the first end of the first jaw.